

1  
R-140123  
E7.4-10770

"Made available under NASA sponsorship  
in the interest of early and wide dis-  
semination of Earth Resources Survey  
Program information and without liability  
for any use made thereof."

**Organization:**

Remote Sensing Institute  
South Dakota State University  
Brookings, South Dakota 57006

**Title:**

Monthly Report to  
National Aeronautics and  
Space Administration

**Report type:**

Monthly Progress Report,  
August 1974

**EREP Investigation Number:**

S452

**NASA Contract Number**

NAS 9-13337

**Principal Investigator**

Victor I. Myers

**Date Submitted:**

September 20, 1974

**NASA Technical Monitor:**

Clayton Forbes  
Operations Room  
Code TF6  
Johnson Space Center  
Houston, Texas 77058

(E74-10770) DEVELOP TECHNIQUES AND  
PROCEDURES, USING MULTISPECTRAL SYSTEMS,  
TO IDENTIFY FROM REMOTELY SENSED DATA  
THE PHYSICAL AND THERMAL (South Dakota  
State Univ.) 2 p HC \$3.25 CSCL 08F

N74-34737

Unclas  
G3/13 00770

### 3.0 Report of work as identified in Ex. A (SOW) --- Contract NAS 9-13337

#### 3.1 Progress Reports

##### a. Overall status ---

A cost proposal for extending the contracting period was prepared and submitted. Analyses were conducted to evaluate the use of photographic and electronic data from the C-130 and RB-57 sensors for assessing the percentages of green vegetation, fallow, and dry vegetation of the 31 separate fields in Southern Texas. The "ground cover" data were determined by sampling 100 randomly placed points from vertical hand-held 35-mm photography. The photographic data were reduced by measuring film density using a 1-mm aperture spot densitometer. The photographic representation of the MSS data were also digitized using a spot densitometer. Analysis of variance, regression, and correlation were applied to the data. A brief report of significant results is being prepared to document and discuss the results.

##### b. Recommendations ---

None at this time

##### c. Expected accomplishments ---

The data will be reduced as it comes available.

##### d. A readily .....results .....

None at this time

##### e. Summary outlook ---

The ground-based ET assessments were conducted for seven different physical settings. The analysis will include a multistage approach for assessing ET of agricultural land.

##### f. Travel summary ---

None expected.